LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

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AMERICAN AUTOBIOGRAPHY.

The famous Dr. Johnson has expressed the opinion that but few men could be trusted to write the history of their own lives. Biography, indeed, he looked upon as a species of authorship that demanded a peculiar fitness, and was not at all to be attempted by every sort of writer. When he was told that Boswell was preparing to write his biography, he is reported to have declared with much vehemence that "if he thought the fellow proposed writing his life he would anticipate him by *taking* his." The *cacoethes scribendi* has not often, in our profession, taken the direction of autobiography. Sir Henry Holland, a little while before his death a few years ago, gave to the world a charming volume of personal recollections, written in the most amiable temper and pleasing style; and the oldest of our Kentucky physicians left behind him at his death, some years before, a work of a similar character. Dr. Drake, too, wrote to his grandson, not long before he died, a series of pleasant letters recounting the incidents of his early life, which have been published since his death. Of Dr. Caldwell's autobiography very different opinions have been expressed by his critics, some—as his old colleague Dr. Gross, for example—declaring that "it is composed in the worst possible taste, and is a libel upon most of the medical men with whom he was brought into contact;" while others—Dr. Billings among the number—affirming that "it is the only work of his which is worth perusal."

But until within a few years past the cases of this character of authorship have been quite sporadic in the medical profession, occurring at distant points and at long intervals. We could wish, in fact, that they had been more numerous. As we read in the writings of Rush his allusions to his personal contentions and trials, we can not help regretting that he has left the world no account of his eventful life. And how interesting would be an autobiography of Physick, who has recorded that he walked the streets of Philadelphia five years before making money enough by his profession to pay for his shoe-leather. How captivating would be the life, from his own pen, of the great New Englander, Nathan Smith, the author, practitioner, and teacher, who lectured in two or three medical schools in the same season, and on nearly every branch of medicine in succession, and went about performing amputations in emergencies with a shoemaker's knife and a tenon saw!

This regret which we experience will not be felt by those who come after us. The sporadic cases of autobiography have grown into an epidemic which threatens to become universal. Every medical man in America is invited to become his own biographer. We have first a volume filled with the lives of "Physicians and Surgeons of the United States," and soon to follow it is announced "Lives of Kentucky Physicians and Surgeons, embellished by photographs." It is a money-making project of enterprising booksellers, but medical men are easily seduced into its encouragement. They are invited every where to write the history of their lives for these encyclopedias, after which they are expected to subscribe for one or more copies of the biography. This costs them ten dollars if they take a single copy; and then, if they wish to see their

faces in the volume, they can get their pictures inserted at prices ranging from one hundred and twenty-five to one hundred and seventy-five dollars.

One of our humorous friends, who adorns the medical press of our country by his wisdom as well as his wit, compares this effort of men to gain notoriety by writing their biographies to the feat of the booby who tried to lift himself up by pulling at his boot-straps, or to Æsop's frog that would emulate the dimensions of the ox. And assuredly as to most of us the undertaking is one of little promise. But let us not bear too hard on the autobiographers. The desire of fame, is it not "the last infirmity of noble minds," and is not vanity a weakness which ministers to the comfort of its possessor like a cloak in cold weather? These volumes, it must be owned, will make dreary reading for all but the few whose records are embalmed in their pages; but for these there is a short paragraph, a few sentences or lines which they would not surrender for many times the cost of the work. And then it will go down as an heirloom in their families to their children and their children's children. So we are inclined to look indulgently upon this growing species of literature, albeit "in its device and devices it speaks of the shop and trade and money-making." Vanity of vanities it may be, this attempt to perpetuate one's name by finding a place for it in these biographies; but hardly less vain than the average labors of medical authors, brushed aside in a little while, as we constantly see them, superseded by those of some later popular favorite. The works of Cullen, the accomplished scholar, the true philosopher; nay, the volumes of our own great Chapman, once so popular with students and practitioners—who reads them now? *Stat nominis umbra;* that is all. And look at Dunglison the learned, so long the successful book-maker, have we it not from a professor of physiology, in less than ten years after the grave closed over him that his physiology, the pride of his life and the labor of a lifetime, is "extinct"?

But these autobiographies, little as they may be read generally, will form valuable storehouses of facts and dates for the future historian of American medicine. Nor can any one say what name among them may become famous. There was a day when Dudley, McDowell, and Bradford were obscure; but what would we not now give for a minute record of their early lives?

Original.

THE SYME'S AMPUTATION AT THE ANKLE-JOINT.

BY E. D. HUDSON, M. D.

The amputation at the ankle-joint (tibio-tarsal) originated by Mr. Syme is one of the triumphant achievements of the art of surgery for the cause of humanity. It is an operation which perfects the surgery of the inferior extremity, and one which is free from the disadvantages and defects pertaining to nearly all amputations of the foot and leg. The history of this amputation (Syme's) during the past twenty-five years, as performed by scientific and expert surgeons, affords conclusive evidence of its advantage to the patient, and demonstrates its superiority in conducing to comfort and usefulness to every other amputation of the foot or leg. It is the least disabling, the least incapacitating, and with scientific prothetic apparatus the patient scarcely realizes any loss of limb. The end of the stump is painless and an enduring basis of support, reliable for any degree of pressure and service, and equivalent in condition and functions to the heel of the unamputated foot.

The merits of a well-performed Syme's amputation can not be exaggerated. The subject of this operation simulates the whole man more perfectly than the subject of any other. I am able to sustain this assertion by tabulated records of two hundred cases, of which I have personal notes.

My first observation of ankle-joint ampu-

tations, and experience in adapting apparatus thereto, was in the year 1853. I was requested by Dr. J. M. Carnochan, Surgeon-in-Chief of the New York State Emigrant Hospital, to give my attention to the first case of ankle-joint amputation performed in this country by the doctor upon one of the hospital patients. Dr. Carnochan had but recently returned from Edinburgh, where he had been a pupil of Mr. Syme, and had become acquainted with his improved amputation at the ankle-joint and his mode of performing it. I examined the case with prejudice and as a critic, regarding it a bold and doubtful innovation, a departure from the best authorities on surgical practice; but the anatomical construction of the stump, its pathological condition, and its capacities for future usefulness with suitable prothetic apparatus, impressed me most favorably. The immediate and the permanent results of that first case were all that could be desired.

In 1854 Dr. Stephen Smith, Surgeon to Bellevue Hospital, performed the second operation in this country of Syme's amputation at the ankle-joint on a girl at the hospital. I was present by invitation. It was a marked success; an honor to the surgeon and an inestimable benefit to the patient. She subsequently acted as a nurse in the wards, and was suspected by but few to be the subject of an amputation. This was the famous Kate Riley case reported in the New York Medical Journal at that time. Her walk and appearance in every respect were natural, and she experienced neither pain nor unusual fatigue. The most hostile and skeptical were silenced.

These two cases of operation at the ankle, and the successful and modified amputations at the knee-joint as revived and performed by Dr. Markoe, eradicated my prejudice against joint-amputations. The only deductions from the facts and cases presented were that the operation was *sufficient;* that it should be performed whenever the circumstances would permit; that it should be the preference of the surgeon in every instance of amputation of the lower extremity when he has the choice of site, whether a favorable or unfavorable condition of the tissues supplying the flap covering the end of the stump existed.

Every day's observation and experience during the period of twenty-four years has confirmed my judgment of the wisdom and benefits of the Syme amputation, as demonstrated by the subjects. Of some two hundred cases of tibio-tarsal amputation after Mr. Syme's method, or as modified by retaining the articular surface of the tibia, with which I have been concerned in consultations, operations, and ultimate reparative treatment with compensative prothetic apparatus, all, without an exception, have resulted either immediately or remotely an entire success. Some few, either by reason of the extent of disease, injury, or shock, or other events to which surgical cases are exposed, underwent sloughing and healed by secondary intention, but in the end invariably yielded good stumps and solid bases of support. They were free from any degree of irritability, tenderness, abrasion, or ulceration, and proved eminently more serviceable than would the same number of cases of ordinary amputation of the foot or leg. A single case, Col. J., on account of ulceration of cartilage and sinuses, required a secondary amputation of five eighths of an inch of the articular portion of the tibia through the indurated bone, resulting in a sound, useful stump, and entire use of the end as a base of support in the most active service.

The number of cases of ankle-joint amputation which at any time after the operation had an unfavorable aspect has not been proportionately greater than after ordinary amputations of the foot and leg, while the result has been far more favorable and useful to the subject. In illustration of this fact I cite the following representative cases:

J. E. A., cavalryman, New York Vols., in the battle at Funkertown, July, 1863, was wounded in left foot by a rifle-ball, which entered at the inner aspect of the tarso-metatarsal line, traversed the tarsus, and

made its exit directly behind the external malleolus. The tarsal bones suffered a compound comminuted fracture, and the external malleolus was fractured. Amputation was performed at the ankle-joint, nine hours after injury, in the field-hospital at Boonsboro, Md. The stump healed rapidly, and he obtained a discharge before cicatrization was complete and firm, attaching himself as assistant to a sutler. In that capacity he injured his stump by neglect and exposure to wet and cold. It became badly inflamed, ulcerated, and painful, and periostitis evidently was developed. I first saw him in October, 1863. He had first visited the tradesmen limb-makers, who urged him to suffer a secondary amputation of the leg to favor the application of their wares. They unqualifiedly denounced the operation and the surgeon who performed it. The appearance of the stump was not encouraging; nevertheless I gave him hope that the inflammation might be subdued, and the wisdom and utility of the operation verified by good results. I presented the case to Surgeon McDougal, U. S. A., Medical Director of the Department of the East, and obtained an order for his admission to the army hospital in Central Park. I was there permitted to exercise an advisory cure of his case. He was placed in a large, well-lighted, airy ward, his limb kept horizontally at perfect rest, and his stump well plied with cold-water dressings. The inflammation and pain subsided, the ulcers became healthy, and the evidences of periostitis passed away. The result was a well-covered, well-formed, firmly-cicatrized, strong, and enduring stump. The sensations of the stump became perfectly normal after two weeks of the initiatory use of the prothetic apparatus. To this day this stump has proved sufficient for the same services of toil, gymnastics, and pleasure, the same as the heel and foot of the uninjured leg. Since his injury he has filled an active position in the War Department, and his loss is rarely suspected. His case is representative of the worst sequelæ of the ankle-joint amputation.

The invariable utility of the Syme stumps has demonstrated the physiological capacity of the base of support which it gives for any amount of service and weight. A gentleman suffering gunshot injury of the foot, and undergoing Syme's amputation at the hands of Prof. W. H. Van Buren, has repeatedly walked thirty miles continuously, upon gunning excursions, without his companions suspecting the defect in his limb. One of the earliest subjects of Mr. Syme's amputation visited me, sixteen years after the operation, for reparative apparatus, and reported his stump at all times serviceable and reliable. He, too, had traveled as far as thirty miles in one day, with the aid of a leather appliance, the "bucket," or shoe.

A Scotchman who had undergone a double Syme's amputation by Mr. Lister, of Edinburgh, in 1859, for comminuted fracture of both feet, emigrated to this country in 1869, and visited me for apparatus. With only leather buckets or cups for his stumps, and a cane with which to balance himself, he had subjected his stumps to daily hard usage. Finally, with the appropriate apparatus constructed to represent the functions of the foot, his walk was easy and stable without the use of a cane, and he has ever since been actively engaged in agriculture.

In six cases of double Syme's amputation the results were all that could be desired as to the formation of the stumps, sufficient covering, complete cicatrization, healthy surface, and immunity from tenderness. One, an imbecile, was not furnished with apparatus. The others are engaged in various pursuits, the apparatus requiring no aid of cane or crutch for auxiliary support.

In the majority of ankle-joint amputations the covering of the stumps has been made from the tissues of the heel sufficiently long to extend anteriorly over the end of the tibia, and united to a short anterior flap above the bulbous end of the stump. Some operations have been varied when disease or injury of the soft tissues had rendered it necessary; either a single or double flap from the side or sides of the foot, with a

cicatrix at the side of the foot or directly across the end of the stump in the median line; exceptionally the flap has been secured from the dorsum of the foot. All such cases tax both the judgment and ingenuity of the surgeon; but the utility of every such stump as a basis of support has justified the expedient, rather than a departure from the operation to one higher up. In no case did the cicatrices prove the seat of pain, tenderness, or annoyance. Cicatricial incrustations will sometimes result from neglect of ablutions; a condition speedily corrected by tepid water, soap, and sperm oil. I have never known a case of chronic tenderness or of ulceration supervening the vigorous use of the stump as the exclusive base of support. There are no data of such occurrences, nor any histological or physiological reason for expecting them any more than in an incised wound over the calcaneum after it has firmly united. My invariable practice has been to examine critically the condition and test the capacity of every such stump before devising and applying prothetic apparatus. If the appearance of the stump is good, the cicatrix healthy, and there remains no tenderness, all is ready. If upon receiving the weight of the body tenderness is complained of, I order the leather bucket, stuffed with elastic pads to be used for a few days, and direct ablutions night and morning. By the time apparatus has been made tenderness has disappeared.

CASE.—Capt. C., of the Alabama infantry, gunshot wound of the right foot. The comminuted tarsus was amputated by the Syme method, and the wound healed chiefly by primary union. In September, 1866, he came to me for reparative apparatus by the advice of a surgeon of this city. He had previously consulted tradesmen limb-makers, who had applied to him their apparatus for leg-amputations, relieving the end of the stump from all weight of the body, thus nullifying the merits of the operation and depriving the patient of its benefits. The patient complained of tenderness and prickling in the base of his stump when testing it as a direct support. By an unusual retraction of the tendon of the gastrocnemius, the cicatrix had been drawn backward directly over the central convexity of the stump, and had become prominent and horny, the seat of tender excrescences. They were carefully removed, cold-water dressings applied at night, a douche each morning, a dry flannel cot placed on the stump. By using the leather bucket in walking for ten days, he hardened the end of the stump; and the apparatus devised specially for his case, as is the rule with me for every case, was worn without pain, the walking being natural and firm without a cane.

Dr. Hewitt, of Minnesota, wrote, in July, 1877, concerning a Syme operation performed by him: "M. P. N. has worn out his apparatus, and wants another. He has given it nine years of constant and hard service. His case is the worst cut I have ever seen a leg submitted to. It has been a splendid success." The occasion of the amputation was an extensive laceration and injury of the tissues of the foot and ankle, requiring the formation of the flap from the outer aspect of the tarsus, and the removal of half an inch of the articular surface of the tibia, bringing the cicatrix in the inner aspect above the newly-formed surface of the foot. Many surgeons would have decided upon amputation of the leg; but no amputation of the leg or foot should be substituted for the Syme when it is admissible, *save that of Lisfranc*. No improvement upon the Syme method can be made by any complex mode of operating, as the section of the cancellated structure of the end of the tibia and of the calcaneums for union thereto. I have had much experience with stumps so constituted—method of Pirigoff. Some of them have been well formed, and were far more serviceable than the stump of any leg-amputation; but where any considerable portion of the calcaneum has been annexed they have proved uncouth in form, resembling a horse's foot, and afford comparatively a poor and painful base of support. Some have resulted in a false joint,

and retraction of the appended part; others in necrosis of the continuity of the tibia above the annexed portion of the bisected os calcis. The case of Philip Larkin, New York Vols., was such.

The plea is often made that the increased length of stump produced by the appended portion of bone affords a superior advantage *to the poor man;* a false plea, however, and better suited to medieval surgery. If for the poor man the bucket arrangement is alone available, an elastic wool felt pad, half or five eighths of an inch thick, in the bucket will be amply sufficient to offset any advantages afforded by the appended calcaneum, and the patient with the Syme stump obtains the more even and reliable base of support. As an alternative to the methods of Chopart, Pirigoff, or Quimby's modification, or a leg-amputation with periosteal covering of the end of the stump, a large experience and extensive critical observation convince me that the *tibio-tarsal*, or Syme's method, *is the most useful and worthy.* Extreme and permanent malformations, deformities of the foot and ankle—bad results of Chopart's operation—caused by sloughing, insufficient covering, retractions, etc., all justify amputation at the ankle. The results in many such unfortunate cases of re-amputation have been beneficial.

Rev. Mr. ——, in 1861, when a collegian, suffered a comminuted fracture of the tarsal and metatarsal bones. His two attending surgeons, unfortunately for the patient, adhered to and performed the Chopart variety of amputation, and also tenotomy of the tendo-Achillis. The flap sloughed, a thin pellicle covered the end of the stump, and the heel was retracted notwithstanding the precautionary tenotomy; his stump was essentially useless. Enduring this condition several months, he finally came to me for advice. I unhesitatingly recommended a re-amputation, and referred him to other surgeons for their counsel. He visited Dr. James R. Wood, who approved a secondary (Syme's) amputation. He visited two subjects of Syme's amputation, and was decided to have the operation performed on himself. He proceeded immediately to his home in Washington, D. C., and was operated upon by his family physician, Dr. May. The success was all that could be desired. With prothetic apparatus he has to this day been equal to any other man; is a prominent clergyman in Vermont, appearing habitually without exciting comment before a fashionable city congregation.

Drs. J. W. S. Gouley and Stephen Smith, of New York, have each made double amputations of the ankle-joints for like occasions, with most admirable success.

In 1860 Rev. Mr. W., then a student at a theological seminary, and matriculated for a four-years' course of study, applied to me for advice. He had a talipes varus of the right foot, and the limb was four inches shorter than its fellow, and much atrophied. His physique and general health in every other respect were good. Any ordinary operation for talipes, with cumbersome apparatus, gave little promise of improving his condition. Considering his age, the public career for which he was preparing, his prospective position in society, for the usual effect, comfort, and usefulness I advised the removal of the foot by the Syme method. He was averse, and deferred the operation until February 29, 1864. On that date Dr. Gurdon Buck invited me to see the patient in consultation in a private room at St. Luke's Hospital. We concurred as to the expediency of amputating the foot and the Syme tibio-tarsal method, as advised by me four years previously, was agreed upon as likely to afford the greatest usefulness and gratification. Under anæsthetics his foot was removed with the scalpel in scarcely over a moment. The flaps were cleansed, the wound closed by three sutures and adhesive straps and cold-water dressings were used. The wound healed primarily. In five weeks he resumed his place in the seminary. In ten weeks from the time of amputation, by inuring it to the use of the bucket, the stump had become free of tenderness; and soon after, with prothetic apparatus, he appeared

on the stage equal, apparently, in physical ability and form to any of his class. In his subsequent career as a clergyman he has been able to cope with his peers in every *walk* of life with activity and zeal. In like cases, where the general conditions have been favorable, the recourse of modern surgery to amputations has proved a blessing to the afflicted one, and might to thousands of others.

An independent and scientific regard and humane solicitude for the greatest benefit which an amputation will probably confer, an analytical comparison of one plan and variety of operation with another can scarcely fail to lead the surgeon to adopt the ankle-joint as a "place of election," and Syme's mode of operation as most conducive to the patient's interests. The facility with which that operation has been and may be performed by a dexterous surgeon familiar with the anatomy of the foot, its comparative safety, and the very little realization of the loss of the foot when the operation is successful, the proper compensation of the foot with appropriate compensative apparatus, should be sufficient data to establish this *place* and *mode* for amputating whenever the surgeon is favored with this choice of site.

Reviews.

Transactions of the Kansas Medical Society. Annual Session, held in Lawrence, Kansas, May 9 and 10, 1877. Eleventh meeting since reorganization.

The above Transactions have just been issued in pamphlet form. In addition to the minutes, obituary resolutions, list of membership, and the president's address, ten papers on medical and surgical subjects are published in the following order: Septic Disease, by Dr. W. L. Schenck; Congenital Tetanus—a Case—by Dr. T. Sinks; Report on Typho-malarial Fever, by Dr. Van Eman; Obstetrics, by Dr. C. C. Shoyer; Report on Materia Medica and Therapeutics, Inunction, by Dr. Daniel C. Jones; A few Notes on Syphilis, by Dr. W. W. Cochrane; Peculiar Conduct of a Case of Labor, by Dr. H. O. Hanawalt; Tympanic Otorrhea, by Dr. J. S. Laurence; Ruptured Perinæum, by Dr. C. V. Mottram; Report of a Case of Paralysis, by Dr. H. S. Roberts.

The transactions of the Kansas Society are creditable to that vigorous young state, and are quite up to the average excellence of medical-society work in America.

Miscellany.

In a late number the Philadelphia Medical Times noticed certain charges of the St. Louis Record against Dr. Sayre, pertaining to his splint, jacket, lectures, etc. Dr. Sayre writes as follows to the Times:

"*Charge* 1. 'Dr. Sayre's hip-joint splint was invented by Dr. Davis.' To refute this I refer you to the Transactions of the American Medical Association for 1860, pages 505 to 508; and by referring to the Patent Office at Washington Synopsis of Specifications, No. 35,303, you will see that Dr. Davis took out a patent for his splint, which you will observe in the specifications is entirely different from mine, which was given to the profession, as well as its various modifications and improvements, as soon as tested and proved to be useful. I also refer you to my Orthopedic Surgery and Diseases of the Joints, Appleton & Co., 1876, pages 260, 261, to prove the falsehood of this first charge.

"*Charge* 2. 'Dr. Sayre's plaster-of-Paris jacket was invented and first applied by Dr. Bryan, of Lexington, Ky.'

"*Answer.* See my report on Pott's Disease, Transactions American Medical Association for 1876, page 585, where you will see full justice has been done to Dr. Bryan; also Richmond and Louisville Medical Journal for May, 1877, page 418; also my recent work on Spinal Curvatures and their Treatment by Suspension and the plaster-of-Paris

Bandage, Smith, Elder & Co., London, Eng., 1877, page 14. Any honest man reading these three references, I think, will never again repeat this charge.

"*Charge* 3. 'Dr. Sayre's method of self-suspension in rotary lateral spinal curvature was invented by Dr. Benjamin Lee, of Philadelphia.'

"*Answer.* See my work on spinal curvature above referred to, Smith, Elder & Co., London, page 93. For fear that you may not be able to obtain the book in this market at present, I will quote the sentence on page 93 to which I refer: 'The late Prof. Mitchell, of Philadelphia, used to treat cases of lateral curvature by suspending them under the arms, and causing them to suspend themselves by the hands. But Dr. Benj. Lee, of Philadelphia, was the first person who caused his patients to practice *self-suspension*, by climbing up a rope which passed over a pulley and was attached to the patient's head by straps passing under the chin and occiput.' I think this answers that charge.

"*Charge* 4. 'Dr. Sayre's Lectures on Orthopedic Surgery were by Dr. Louis Bauer, formerly of Brooklyn, New York, now of St. Louis.'

"*Answer.* By referring to the preface of my book on Orthopedic Surgery and Diseases of the Joints, Appleton & Co., New York, 1876, it will be seen that the book was published from stenographic notes of my lectures in Bellevue Hospital Medical College, session of 1874–75, taken at the time by Dr. Wesley M. Carpenter, of this city. Most of the lectures were upon cases presented at the time in the lecture-room, and which Dr. Bauer could never have seen, as he at the time lived in St. Louis. The statement is therefore too absurd to demand any further notice. The general charge of plagiarism in the last sentence quoted from the Record, not being *specific*, can not be *specifically* refuted; but to it I make a general denial.

"Please give this an insertion in your next issue, with such notes and comments as you may think proper."

How the Chinese Make Eunuchs.—The following curious description is given by a writer in the Lancet: The operation is performed at an establishment maintained for the purpose, immediately outside one of the palace gates. The operators are known as "knifers," and they contrive to keep the trade in their own families. For each castration, and the subsequent care of the case, they receive the equivalent of about £1 16*s.* sterling. When about to be operated on, the patient is placed in a semi-supine position, on a broad bench. One man, squatting behind him, grasps his waist, and one man is told off to each of his legs. Bandages are fastened tightly round the hypogastric and inguinal regions, the penis and scrotum are three times bathed with a hot decoction of pepper-pods, and the patient is finally, *if an adult*, solemnly asked whether he will ever repent. If he appears doubtful, he is unbound and dismissed; but if his courage has held out, as it usually has, all the parts are swiftly swept away by one stroke of a small sickle-shaped knife. A pewter plug is inserted into the urethra, the wound is covered with paper soaked in cold water, and is firmly bound up. The patient, supported by two men, is kept walking round the room for two or three hours, after which he is permitted to lie down. For three days he gets nothing to drink, nor is he allowed to pass urine. At the end of this period the dressings are removed and the plug is taken out. The parts generally heal in about one hundred days, when the patient is inspected by an old and experienced eunuch, in order to make sure that the mutilation is complete. About two per cent of all cases prove fatal, some by hemorrhage and some by extravasation. For a long time after the operation there is nocturnal incontinence of urine.

Hints on Horse-shoeing.—A writer in the Southern Medical Record justly says that although this is not a medical topic, yet medical practitioners more perhaps than any other class need to know how a horse should be shod.

The length of time a shoe should be worn will of course depend upon the kind of work the horse is doing and the sort of roads over which he travels.

In four to six weeks the hoof will have grown too large for the shoe, which will press inward upon the soft parts of the foot, and the horse will become lame. Before this occurs the shoe should be reset or a new pair put on. As a general rule, a saddle-horse will ride better without corks on his shoes. The shoe should be made to fit the foot, and not the foot the shoe. It should rest firmly and uniformly upon the outer rim of the hoof, so as to require little or no rubbing off of the hoof by the rasp. Three nails on a side are enough, to be driven in with such inclination as to come out at a point about one and a half inches above, and yet so shallow as not to touch the quick. To know how to do this properly, the smith must study the anatomy of the horse's foot. A small, tough nail, made to fit tightly the hole in the shoe, should be used; otherwise the shoe will soon become loose. The frog in the foot may be lightly trimmed, so as to remove any jagged portions; but should not be cut or rasped off, as is usually done. It is somewhat elastic in structure, and is evidently designed to lessen concussion and divide the pressure on the foot. The hoof should not be burned in fitting the shoe, as is commonly done. Unless your smith is very trustworthy, it is well to stand by and see your horse shod.

TATTOOING SYPHILIS.—A striking example of the spread of syphilis from secondary lesions came to notice in this city recently. It was noted at the Philadelphia Hospital, some time ago, that a number of patients who had been brought to that institution suffering with syphilis had been inoculated with it through the process of tattooing. Shortly afterward it was ascertained that between two and three hundred persons at Reading, Pa., had been similarly inoculated, and that it was the work of a tramp named James Kelly, more familiarly known as "Kelly, the Bum." Measures were at once taken by the police authorities of both cities to insure the arrest of the man. He freely acknowledged that he was in the tattooing business, and that he had pursued his calling at Reading. He most positively denied, however, any intention of injuring any one, and produced the paraphernalia used in the tattooing—a number of needles and a quantity of India ink—stating that he followed it as a means of livelihood. Dr. F. F. Maury examined Kelly, and found that he was afflicted with the disease, and that in plying his vocation he would put the needles in his mouth, which was filled with sores, in order to wet them preparatory to use, and by this means had innocently inoculated the persons who had engaged him to perform the operation.—*Ex.*

JABORANDI IN MASTITIS.—G. M. Wells, M. D., of Sonoma, Cal., writes: "Allow me to direct the attention of the profession to the use of jaborandi in mammary abscess. Mrs. G. has been the subject of repeated abscesses. As soon as one was formed and lanced another succeeded, until she became 'weary and worn out.' Quinine failed, sulphocarbolates did no good, belladonna externally and internally disappointed our hopes, so I determined to try some other remedy, and gave the following:

℞ Ext. jaborandi fld.....
Ext. dandelion fld..... } āā ℥ ss;
Syr. simp..... ..... fl. ℥ iij. M.
S. Half ounce every two hours.

I directed the above to be used until profuse sweating was produced, which occurred after the third dose in such profusion as to saturate the linen thoroughly, and continued for several hours. As soon as the sweating became thoroughly established the temperature and pain, which before had been excessive and severe, were reduced and relieved; and the symptoms, which were so threatening the day before, were all gone. The debilitating effect of the sweating passed off in a few days, since which time the patient has been in excellent health. I have had no

other opportunity to test the remedy in this class of cases, but have the utmost confidence in its virtue."—*New Remedies.*

ORIGIN OF THE TERM SYPHILIS.—Dr. L. P. Yandell, jr., Professor of Therapeutics and Clinical Medicine in the University of Louisville, ventures to offer a theory upon the subject which seems to him more probable than any hitherto suggested. "The town disease," "the town disorder," are terms used by the lower classes, and especially among the rustics, to indicate this affection. Syphilis, from our first knowledge of it, has been eminently a city disease. The Latin word *civilis* signifies pertaining to a city or to citizens; and it occurs to me that *morbus civilis—i. e.* citizens' disease, or city disease—was probably the first popular name for syphilis. Furthermore it is perfectly natural, and in accordance with popular custom, that for the sake of brevity the word *morbus* should have been dropped, leaving only *civilis*. The alteration in the spelling of the word is not remarkable. Chancre was once spelled shanker, scrofula was spelled scrophula, and often we find even the meanings of words wrenched entirely from their original signification.—*Medical Press and Circular, London.*

SIZE OF FAMILIES IN COLOMBIA.—In the state of Antioqua, Colombia, each marriage produces, as a rule, from ten to fifteen children. The mothers all nurse their own children, at least till the ninth month, when the symptoms of a new pregnancy usually present themselves. Dr. Posada-Aranjo knows a woman who has thirty-four children, all living. He also knows a man who has been married three times, and has had fifty-one children. As this man's present wife is still young, he has a chance of increasing the number of his offspring to sixty. The women marry at the age of thirteen, fourteen, or sixteen years. The first menstruation occurs at the age of thirteen or fourteen years.—*New Remedies.*

Selections.

Treatment of Valvular Lesions.—I will now ask your attention to the treatment of valvular lesions with and without enlargement of the heart. We frequently find in practice evidence of valvular lesions either without or with only very slight cardiac enlargement. What are the indications for treatment in cases in which valvular lesions are present, but have not led to enlargement of the heart, or at most only very slightly, and that in the way of hypertrophy? *There are no special indications*, and that is an important statement. It is not infrequently the case, when valvular lesions of the heart are discovered, that the practitioner feels it to be a very serious matter, and that it must be met correspondingly with injunctions regarding habits of life, and perhaps with regard to the use of remedies. There are certainly no indications for the use of the remedies with the view of removing the lesions. These must be accepted as they are; and yet I have known patients to be placed under treatment in consequence of the vague and irrational idea that remedies might have something to do with diminishing valvular lesion. But are we to ignore the lesions altogether? Not altogether. We are to take into consideration the possibility and the probability that they will increase. Though there are no symptoms at present indicating the existence of the trouble, and the lesion would not have been known save by physical signs, the probabilities of increase of the lesion must be taken into consideration, and an endeavor made to forstall such increase, to render it as slow as possible. How shall this be done? We make the endeavor by giving certain directions which relate to the general regimen of the patient. In some instances, but this must needs be done with great discretion, it may be well to state to the patient that he has valvular lesion of the heart, as it may make him more considerate with reference to proper care for himself.

It is proper to advise this class of patients not to overtax the heart more than can not be avoided, either by improper muscular exercise or great mental excitement. We should not go too far in our injunctions, as is too frequently done. It is not uncommon for physicians to overestimate the danger as regards the progress of the lesion, and to place restrictions upon the patient which are unnecessary, and which perhaps expose him to very great inconvenience. I will give you the rule which I have adopted in giving these patients general directions.

With regard to exercise and excitement, it is not only proper but advisable to say that such amount of physical exertion should be made as can be done with entire comfort. The patient will receive no harm from muscular exercise if it simply be limited by the

sense of comfort. Muscular exercise which does not excite the action of the heart so as to occasion discomfort is to be indulged in, for it can be done with benefit. The same rule holds good with regard to mental excitement. All mental excitement, if possible, should be avoided which increases the action of the heart to such an extent as to give rise to a sense of discomfort.

As a general statement, the amount of enlargement of the heart, and the kind of enlargement, are to be considered as criteria of the importance of valvular lesions. But before the enlargement has taken place, it is an interesting point of investigation to form some idea regarding the amount of valvular lesion. The murmurs give us no definite indication, for the intensity of the murmur has no relation to the amount of lesion. We may have an intense murmur with a very small lesion; and, upon the other hand, we may have a feeble murmur with a very extensive lesion. Is there any means by which we can obtain information concerning the degree of the valvular lesion before the heart has become much enlarged?

We may obtain information by directing attention to the second sound of the heart as heard in the second intercostal space upon the left and right side of the sternum. Upon the right side of the sternum, in the second intercostal space, is the point where the aortic second sound is heard. The second sound heard in the second intercostal space on the left side of the sternum is produced mainly by the pulmonic valves.

The information regarding the degree of valvular lesion present is obtained by comparing the aortic second sound with the pulmonic second. First, let us suppose we have evidence of valvular lesion at the aortic orifice, as shown by the presence of a direct or regurgitant murmur, or both. We wish to form an opinion as to whether much damage, if any, has been done to the aortic valves. We then compare the aortic second sound with the pulmonic second sound; and if it is found to stand in its normal relation with the pulmonic second sound, we may be sure that the amount of damage done to the aortic valves is not very great. In health the aortic second sound is somewhat louder, higher in pitch, and has more of the valvular quality, the short, clicking character, than does the pulmonic second sound. In proportion as the function of the valves is impaired by lesions will the intensity of the sound be diminished; and if the aortic valves have undergone great damage, the aortic second sound may be entirely wanting. We have then a ready way of determining to what extent damage has been done at the aortic valves.

Suppose we have mitral lesion, either obstructive or regurgitant, or both. We may form a judgment regarding the amount of regurgitation or obstruction by comparing the aortic second sound with the pulmonic second sound. In proportion as we have contraction of the mitral orifice, the left ventricle contracts upon an insufficient quantity of blood to fully dilate the aorta and its branches; the recoil of the arteries is less, the valves are expanded with less force, and there is a proportionate weakening of the aortic second sound as compared with the pulmonic. The effect, then, of mitral obstructive lesion is to weaken the aortic second sound. If the mitral obstructive lesion has led to enlargement of the heart, we have seen that the right ventricle is the part especially hypertrophied, and the hypertrophy of the right ventricle is represented by the intensity of the pulmonic second sound. There is, then, with mitral direct lesion, involving contraction at the mitral orifice, an abnormal relation between the aortic second sound and the pulmonic second sound, consisting in a weakening of the aortic and an intensifying of the pulmonic, when hypertrophy of the right ventricle has taken place.

The same is true of mitral regurgitation. A less quantity of blood is sent to the aorta, the recoil of the artery is diminished, the valves are expanded with less force than normal, and as a consequence the aortic second sound is weakened; and when the right ventricle becomes hypertrophied the pulmonic second sound becomes intensified.

This is of practical utility in forming a judgment with regard to the extent of the valvular lesions.

We have seen that the first effect produced by valvular lesions of the heart is to produce hypertrophy, and such hypertrophy is conservative; it has a real value and advantage. If it were practical to diminish the hypertrophied condition, the patient would be placed in a very much worse condition by so doing.

As a general statement, patients with valvular lesion of the heart do not suffer much inconvenience as long as the hypertrophy which follows predominates. A patient with hypertrophy of the heart predominating may take considerable muscular exercise with advantage, but he should carry it only to such an extent as he can do without suffering the least discomfort.

When, however, the dilatation predominates over the hypertrophy, the symptoms to which I called your attention in a previous lecture are developed; such as dyspnœa, first upon exertion, next when at rest, and general dropsy.

We will now assume that there is evidence of dilatation of the right ventricle; that the patient can not take but little exercise without suffering from dyspnœa in an extreme degree, perhaps is unable to assume a recumbent posture, and there is cyanosis with more or less dropsy. What are the indications for treatment? The heart may be beating regularly or irregularly; different cases differing

in this respect without apparent reason for such difference. It is proper, if possible, to remove the dropsy. We usually endeavor to do this by the judicious use of hydragogue and diuretic remedies. In this way we may be able, perhaps, to relieve the patient of his dropsy.

We may also relieve the dyspnœa by the judicious use of certain measures. Opiates may sometimes be resorted to, but very carefully. Some prescribe ethereal preparations, and these often afford marked relief.

We can hardly expect to relieve the patient of dyspnœa, especially upon exertion, as we may expect to succeed in removing the dropsy. However, these symptoms claim palliative measures of treatment.

Now as regards the heart itself. We may often, under these circumstances, derive great benefit from the use of digitalis, especially when the heart is irregular in its action. A feeble, irregular action of the heart is the condition which is most likely to be benefited by the judicious use of digitalis. It is not necessary to carry it to very large doses; ten or fifteen drops of the tincture may be repeated at rather short intervals, the object being to keep up the *continuous* effect of the drug. The effect frequently in this class of cases is to produce regularity of the heart's action, diminish the frequency of the heart-beat, and increase its power, thus accomplishing the objects desired. Now, while this is being done, the great object of treatment, other than the relief of special symptoms, is to improve the condition of the blood by improving the general condition of the patient. In other words, our object is to put the system in such condition as will best tolerate an affection which must continue and increase. These patients not infrequently are anæmic, and this condition of the blood always increases their distress and suffering; in short, all the symptoms incident to cardiac disease. If we can restore the blood to its proper condition, perhaps the patient may tolerate the cardiac affection without much inconvenience. If anæmia is present, we endeavor to restore the blood to its proper condition, not only by the use of chalybeates, but by the use of such measures as will improve digestion, etc. The capital principle in the treatment of cardiac diseases is to endeavor to improve the general condition of the system, with the view of securing as much tolerance of the affection as possible.—*Extract from Report of Austin Flint, sr.'s, Lectures in the New York Medical Record.*

Treatment of Aortic Lesions.—I pass now to the treatment of aortic lesions, which presents some points of difference as contrasted with the treatment of other cardiac lesions.

We do not have dyspnœa, we do not have dropsy unless enlargement by dilatation has extended to the right side of the heart. Hypertrophy and dilatation of the left side of the heart, dependent upon aortic lesions, do not lead to dyspnœa or general dropsy. They involve distress which is described as palpitation, or a sense of discomfort referable to the precordia. The suffering may be very great, but it is not, properly speaking, dyspnœa.

Now it has been stated that in cases of aortic lesions, especially involving free regurgitation, there is danger of sudden death, and that fact is to be considered in the treatment of this class of cases. Other things being equal, the danger of sudden death is in proportion to the regurgitation at the aortic orifice and weakening of the left ventricle by dilatation.

What can be done to relieve the distress of the patient and prevent a fatal termination?

We may have here, as with mitral lesions, a feeble, irregular action of the heart. Shall we employ digitalis, as in the treatment of the same condition in mitral lesions? There is a difference of opinion with regard to the correct answer to this question. Some consider that this remedy may involve danger, and in this manner: if it has the effect of diminishing the frequency of the heart's action, over-filling of the left ventricle is more likely to occur; hence the patient is exposed to more danger from paralysis of the heart, and thereby sudden death. On the other hand, it is argued that by giving greater power to the heart's action, notwithstanding the diminished frequency, the patient is less liable to have over-accumulation of blood in the left ventricle. As far as my experience goes, the truth lies between the two extremes. I would use digitalis with a certain amount of reserve in the treatment of aortic lesions, but it seems to me evident that in certain cases benefit follows the judicious use of the remedy. We can give it without running the risk of producing much slowness in the heart's action, and thus secure the tonic effect of the remedy without incurring the danger which deters some from employing it at all. As regards other measures to be employed, the same general principle is applicable as in the treatment of other lesions. The general condition of the patient is to be improved as much as possible, especially with reference to anæmia. It has been justly said that "a lame heart needs good blood." Active muscular exercise or great mental excitement are to be especially avoided in aortic lesions in which there is evidence of free regurgitation at the aortic orifice, and evidence of dilatation of the left ventricle. Under those circumstances we should not hesitate to caution the patient, and perhaps it may not be imprudent in certain cases to intimidate the patient by telling him there is danger of sudden death unless certain prudential measures are observed.—*Ibid.*